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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,301	03/16/2004	Larry A. Voecks	380-001CIP	3889
23429	7590	02/16/2006	EXAMINER	
GREGORY SMITH & ASSOCIATES 3900 NEWPARK MALL ROAD, 3RD FLOOR NEWARK, CA 94560			SMITH, RICHARD A	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/802,301	VOECKS, LARRY A.	
	Examiner	Art Unit	
	R. Alexander Smith	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-18 is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20050906</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification is objected to because of the following informalities: Page 18, line 13 is confusing because if the index member is part of the pendulum, shaft, index member arrangement it is unclear as to how the pendulum 66 can pass the index member 68.

Claim Objections

2. Claims 1-12 are objected to because of the following informalities:

Claim 1: The claim language is confusing because it is unclear if the applicant is claiming an inclinometer or an inclinometer in combination with an object. The preamble is drawn to an inclinometer, however the claim states a housing fixed to the object and a magnet attached to the object. Therefore the claim language needs to be changed according to whether the applicant is claiming the subcombination or the combination.

Claim 7, 9 and 10 also claim the object in combination. Clarification is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,600,954 to Clarke in view of EP 841,296 to Fujii.

Clark discloses an inclinometer comprising a housing, a rotatable shaft 17, a pendulum 11, an index member 19 and 20 formed of a ferromagnetic material and a magnet 21 and 22, the magnet being an electromagnet, the magnet being a permanent magnet (column 1, lines 18-22), the index member formed of a plurality of members 19 and 20 located around the shaft, the index members being permanent magnets (column 1, lines 18-22), the pendulum being rigid.

Clark does not teach the device being attached to an object and the object being a spreader bar supporting a container load and the support surface being a carriage of a crane.

Fujii discloses an object and a spreader for supporting a container and a support surface being a crane and discloses that problems result from oscillation and vibration while trying to handle a container and discloses that a sensing device 28 is used in order to measure the oscillation and vibration for correction. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to modify the inclinometer, taught by Clark, by attaching it to an object and the object being a spreader bar, as suggested by Fujii, in order to actually use the inclinometer for a constructive purpose and to provide information which can be used to correct the oscillation and vibration of the spreader bar.

5. Claims 1, 3, 4, 7, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,933,821 to d'Enis in view of EP 841,296 to Fujii.

d'Enis discloses a housing, a rotatable shaft 5, a pendulum 8, an index member 8 formed of a ferromagnetic material and a magnet 10, the magnet being a permanent magnet the index member being formed from a ferrous material (column 2, lines 18-26), the magnet being a plurality of permanent magnets mounted on a ring and located around the index member, the ring is not concentric with the shaft thereby creating an increasing air gap between the ring and the index member (column 3, lines 12-38 via the discussion of several magnets suitably shaped to provide an annular magnet when juxtaposed and via the discussion of not to be symmetrical, eccentrics, and the magnet may be adjusted axially while the spindle bearing remains stationary) the pendulum being rigid.

d'Enis does not teach the device being attached to an object and the object being a spreader bar supporting a container load and the support surface being a carriage of a crane.

Fujii discloses an object and a spreader for supporting a container and a support surface being a crane and discloses that problems result from oscillation and vibration while trying to handle a container and discloses that a sensing device 28 is used in order to measure the

oscillation and vibration for correction. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the inclinometer, taught by Clark, by attaching it to an object and the object being a spreader bar, as suggested by Fujii, in order to actually use the inclinometer for a constructive purpose and to provide information which can be used to correct the oscillation and vibration of the spreader bar.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke and Fujii as applied to claims 1-6 and 11 above, and further in view of US 2002/0033052 to Kondo et al.

Clarke and Fujii together teach all that is claimed as discussed in the above rejections of claims 1-6 and 11 except for a proximity void located in the shaft and a proximity sensor.

Although Kondo et al. teaches a device intended to measure torque on rods, Kondo et al. does disclose that reference marks can be in the form of protuberances (prior art and the form of proximity voids (10, 12, 20 and in particular 22) can be located in a shaft and that proximity sensors can be used to detect the voids. Kondo also discloses in the prior art that protuberances (2 of the prior art or a wire member [0016]) can also be used and that this allows a variety of sensors to be employable [0019] and that is simple in construction and less costly [0018]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to alter the sensing arrangement, taught by Clarke, by replacing it with a void and proximity sensor, as suggested by Kondo et al., in order to allow for a variety of sensors to be used and to provide a sensing means that is simple and less costly.

Allowable Subject Matter

7. Claims 13-18 are allowable.
8. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.
9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

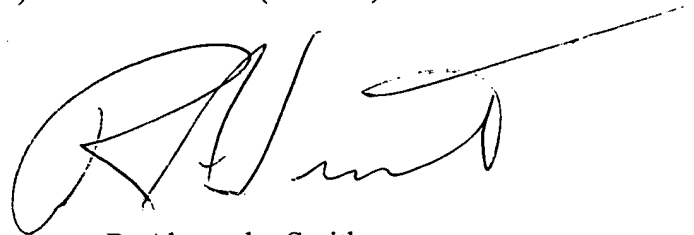
10. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related inclinometers and devices.

Art Unit: 2859

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'R. Alexander Smith', with a long horizontal stroke extending to the right.

R. Alexander Smith
Primary Examiner
Technology Center 2800

RAS
February 15, 2006